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TITLE: Joint Operations Picture

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This paper is part of the following report:

TITLE: Multimedia Visualization of Massive Military Datasets [Atelier OTAN sur la visualisation multimedia d'ensembles massifs de donnees militaires]

To order the complete compilation report, use: ADA408812

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The following component part numbers comprise the compilation report:

ADP013309 thru ADP013341

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Joint Operations Picture

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The Problem

- The ability to give the commander at the Strategic / Operational level the appropriate amount of situational awareness in order to facilitate understanding to aid the command process.
- The total set of information, in whatever form, which is a managed and validated view of the history, current situation and future plans for all components of an operation.
- Right information, right form, right time!

What is it?

- Not just the geo-spatial situational awareness picture
- Information centric and includes facilities for information retrieval, linking and management as well as database interaction
- Dynamic by phase of operation, level in command and role/function
- The JOP is not just technology it requires an information culture, standards, procedures, a diversity of information sources and an infrastructure.

Key Purposes

- Enable individual and collective awareness of operational situation
- Enable individuals/groups to share/compare/contrast their views
- More effective means of communicating operation information
- Enable individuals/groups to model/represent the operation with combined knowledge and perception

Functional Requirements

- HCI
- Searching capability
- Information assurance
- Aggregation

- Data replication/synchronization
- Ownership
- Lifecycle
- Time stamp
- Archiving, Backup and recovery

Profiling

- **Profile**
 - security
- **Use of Digital sigs/PKI**
- **Managed Access-control & Capabilities Environment (MACE)**
 - function
 - command level
 - personnel preferences - language e.t.c.
- **Information Broker**
 - ability to change user profile
 - suggest more information

Future Issues

- **Summarisation**
 - between command levels
 - between cells
 - over various sources of information
 - truth maintenance
- **Certainty**
 - representing uncertainty - sliding scale?
 - aggregation of weightings
 - degradation of data - fading?
- **Alerting**
 - track changes
 - communication problems
 - alerting mechanisms

Discussion – Paper 10

Can you overlay images on the graph?

- Yes, but it is a controllable option.

Is there an overview to show an inventory of available information?

- Not at present, but it could be done.

How well does it interface with other systems?

- It is designed to look for information from other sources.

Collaborative aspects at different levels of command: Is there a common update so all levels get the most recent data?

- For group work there can be shared information in the individual wants to publish it, at a given security level.